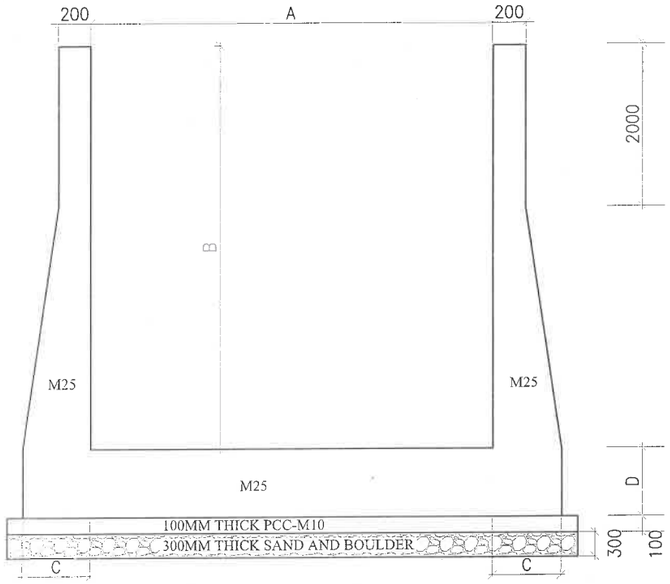
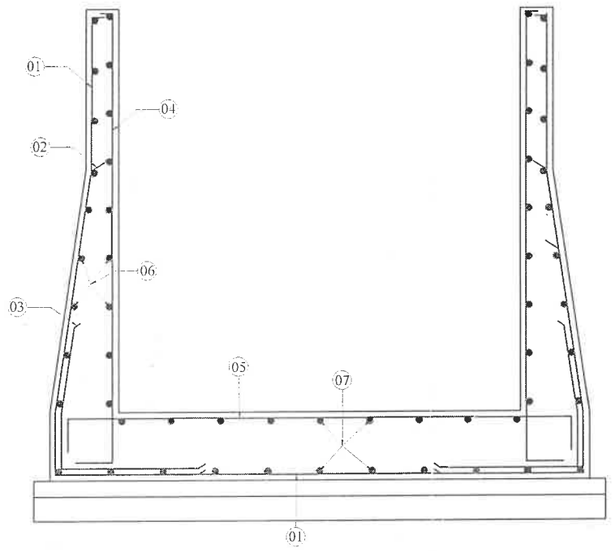


CROSS SECTION OF RCC U-SHAPE DRAIN



REINFORCEMENT DETAILS OF RCC U-SHAPE DRAIN

DIMENSIONS OF U-SHAPE DRAIN

ALL DIMENSIONS IN MM

S.NO.	DRAIN WIDTH	DRAIN DEPTH	WALL BOTTOM THICKNESS	BASE SLAB THICKNESS
	A	B	C	D
1	2000	2000	200	200
2		3000	300	300
3		4000	400	400
4		5000	500	500
5	3000	2000	200	200
6		3000	300	300
7		4000	400	400
8		5000	500	500
9	4000	2000	200	300
10		3000	300	300
11		4000	400	400
12		5000	500	500
13	5000	2000	200	350
14		3000	300	350
15		4000	400	400
16		5000	500	500

NOTES:-

1) All dimension are in mm and reduced levels are in meters.
2) Do not scale the drawing.written dimensions only shall be followed
3) The structure is designed adopting the following IRC and IS CODES IRC-21 , IRC 6-2014 & IS 456-2000
4) Grade of concrete conforming to IS 456-2000
   (i)Levelling coarse in foundation CC -M10 with 20mm d/s
   (ii)Raft & walls -CC-M25 with 20mm downsize coarse aggregate
5) All reinforcements shall be of high yield strength deformed bars (Grade designation Fe-550)
6) Sharp edges of concrete shall be chamfered
7) Filling behind wall shall be as per relevant IRC specifications
8) Minimum clear cover to the reinforcement shall be 50mm unless otherwise mentioned
9) Joints and lapping of bar shall be suitably staggerd

Important Note:

While execution the strata(SBC) should be verified and suitable modification can be made.

BAR BENDING SCHEDULE

ALL DIMENSIONS IN MM

BAR NUMBERS AND SHAPE

S.NO.	DRAIN WIDTH	DRAIN DEPTH	01								02						03						04						05					06			07			
	A	B	a	b	c	d	e	Total bar Length (2a+2b+2c+2d+e)	Ø	Spac.	f	g	h	Total bar Length (f+g+h)	Ø	Spac.	i	j	k	Total bar Length (i+j+k)	Ø	Spac.	l	m	n	Total bar Length (l+m+n)	Ø	Spac.	o	p	Total bar Length (2o+p)	Ø	Spac.	q	Total bar Length (q)	Ø	Spac.	t	Total bar Length (q)	Ø	Spac.
1	2000	2000	100	1950	-	150	2300	6700	12	180	0	0	0	0	0	0	0	0	0	0	0	0	100	2100	100	2300	10	250	100	2300	2500	10	200	12000	12000	10	200	12000	12000	10	200
2		3000	100	1950	1000	250	2500	9100	12	200	500	250	850	1600	12	200	0	0	0	0	0	0	100	3200	200	3500	12	200	200	2500	2900	12	200	12000	12000	10	200	12000	12000	10	200
3		4000	100	1950	2000	350	2700	11500	12	180	1500	350	950	2800	16	180	0	0	0	0	0	0	100	4300	300	4700	12	200	300	2700	3300	12	200	12000	12000	10	200	12000	12000	10	200
4		5000	100	1950	3000	450	2900	13900	12	200	2500	450	1050	4000	16	200	1000	450	1050	2500	16	200	100	5400	400	5900	12	225	400	2900	3700	12	200	12000	12000	10	175	12000	12000	10	175
5	3000	2000	100	1950	-	200	3300	7800	12	180	500	200	600	1300	10	360	0	0	0	0	0	0	100	2150	100	2350	10	250	150	3300	3600	10	225	12000	12000	10	200	12000	12000	10	250
6		3000	100	1950	1000	250	3500	10100	12	200	500	250	1250	2000	12	200	0	0	0	0	0	0	100	3200	200	3500	12	200	200	3500	3900	12	180	12000	12000	10	200	12000	12000	10	200
7		4000	100	1950	2000	350	3700	12500	12	180	1500	350	1250	3100	16	180	0	0	0	0	0	0	100	4300	300	4700	12	200	300	3700	4300	12	180	12000	12000	10	200	12000	12000	10	175
8		5000	100	1950	3000	450	3900	14900	12	200	2600	450	1350	4400	16	200	1200	450	1350	3000	20	200	100	5400	400	5900	12	225	400	3900	4700	12	150	12000	12000	10	175	12000	12000	10	175
9	4000	2000	100	1950	-	250	4400	9000	12	180	500	250	1000	1750	10	360	500	250	1000	1750	10	360	100	2200	100	2400	10	250	200	4400	4800	12	150	12000	12000	10	200	12000	12000	10	175
10		3000	100	1950	1000	250	4500	11100	12	200	500	250	1450	2200	12	200	250	250	500	1000	10	400	100	3200	200	3500	12	200	200	4500	4900	12	200	12000	12000	10	200	12000	12000	10	200
11		4000	100	1950	2000	350	4700	13500	12	180	1700	350	1550	3600	16	180	0	0	0	0	0	0	100	4300	300	4700	12	200	300	4700	5300	12	150	12000	12000	10	200	12000	12000	10	175
12		5000	100	1950	3000	450	4900	15900	12	200	2500	450	1650	4600	16	200	1000	450	1550	3000	20	200	100	5400	400	5900	12	225	400	4900	5700	12	180	12000	12000	10	175	12000	12000	10	175
13	5000	2000	100	1950	-	300	5400	10100	12	180	500	300	1000	1800	12	180	500	300	1000	1800	12	180	100	2250	100	2450	10	250	250	5400	5900	12	150	12000	12000	10	200	12000	12000	10	175
14		3000	100	1950	1000	300	5500	12200	12	200	500	300	1800	2600	12	200	500	300	1800	2600	12	200	100	3250	200	3550	12	200	250	5500	6000	12	150	12000	12000	10	200	12000	12000	10	200
15		4000	100	1950	2000	350	5700	14500	12	180	1500	350	1850	3700	16	180	1000	350	1850	3200	16	180	100	4300	300	4700	12	200	300	5700	6300	12	150	12000	12000	10	200	12000	12000	10	200
16		5000	100	1950	3000	450	5900	16900	12	200	2500	450	1950	4900	16	200	1000	450	1950	3400	20	200	100	5400	400	5900	12	225	400	5900	6700	12	150	12000	12000	10	175	12000	12000	10	175

"GOOD FOR CONSTRUCTION"

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಬೃಹತ್ ಮಳೆ ನೀರುಗಾಲುವೆ, ಮಹದೇವಪುರ ವಲಯ
ಬೃ.ಬೆಂ.ಮ.ಪಾ. ಬೆಂಗಳೂರು.

ಪ್ರಧಾನ ಅಭಿಯಂತರರು ಮತ್ತು ಪದನಿಮಿತ್ತ
ಮುಖ್ಯ ಅಭಿಯಂತರರು ಬೃಹತ್ ಮಳೆ ನೀರುಗಾಲುವೆಗಳು
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

CONSULTANTS:
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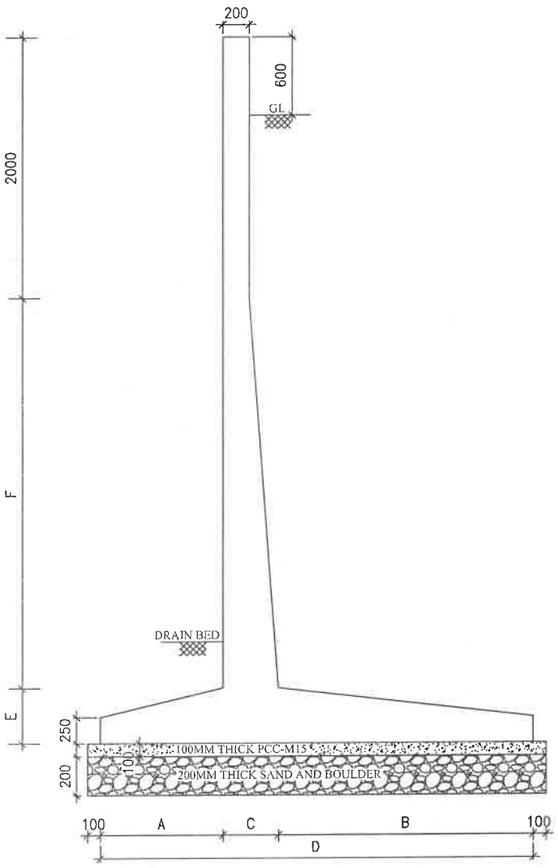
PH: 9964338888, TELE PHONE: (080) 28554444.

PROJECT TITLE:
STORM WATER DRAIN UNDER BBMP LIMITS

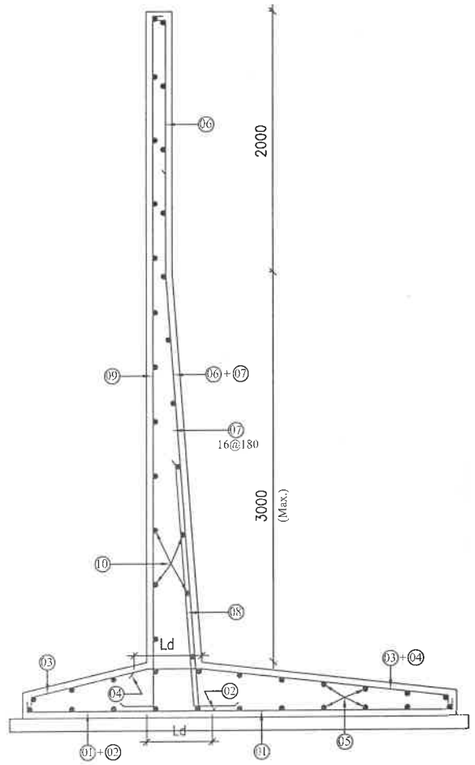
DRAWING TITLE:
RCC U-SHAPE DRAIN

CLIENT
BBMP, BANGALORE

Dsg.	Chk.	APP.	Scale	Drawing Status
			As shown	FOR APPROVAL
			Sheet No.	Rev
			01 OF 01	0



CROSS SECTION OF RCC RETAINING WALL



REINFORCEMENT DETAILS OF
RCC RETAINING WALL

NOTES:-

1) All dimension are in mm and reduced levels are in meters.
2) Do not scale the drawing.written dimensions only shall be followed
3) The structure is designed adopting the following IRC and IS CODES IRC-21 , IRC 6-2014 & IS 456-2000
4) Grade of concrete conforming to IS 456-2000
   (i)Levelling coarse in foundation CC -M10 with 20mm d/s
   (ii)Retaining walls -CC-M25 with 20mm downsize coarse aggregate
5) All reinforcements shall be of high yield strength deformed bars (Grade designation Fe-550)
6) Sharp edges of concrete shall be chamfered
7) Filling behind retaining wall shall be as per relevant IRC specifications
8) Minimum clear cover to the reinforcement shall be 50mm unless otherwise mentioned
9) Joints and lapping of bar shall be suitably staggerd
10) SBC Shall not be less than 200 Kn/m2

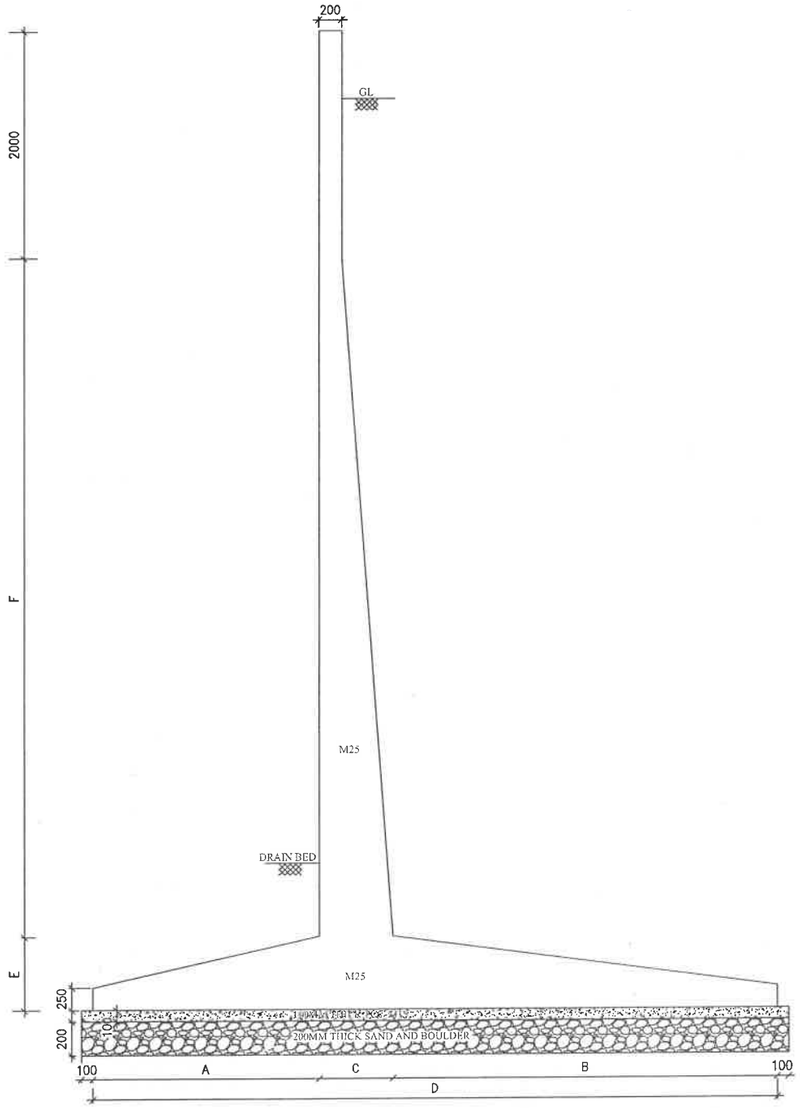
Important Note:

While excution the strata(SBC) should be verified and suitable modification can be made.

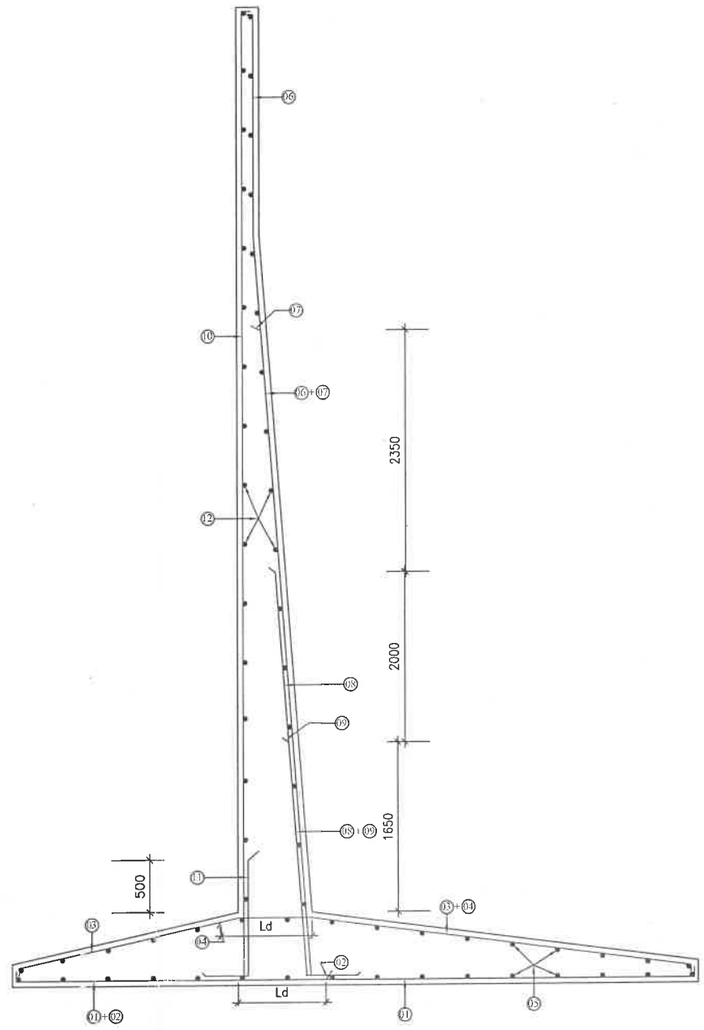
RCC RETAINING WALL DIMENSIONS AND BAR BENDING SCHEDULE

ALL DIMENSIONS ARE IN MM

| S.NO | STEM HEIGHT | TOE WIDTH | HEEL WIDTH | WALL THICKNESS AT BOTTOM | TOTAL BASE SLAB WIDTH | BASE SLAB THICKNESS NEAR STEM | WALL HEIGHT FOR TAPER PORTION | BAR NUMBERS AND SHAPE | | |



CROSS SECTION OF RCC RETAINING WALL



CROSS SECTION OF RCC RETAINING WALL

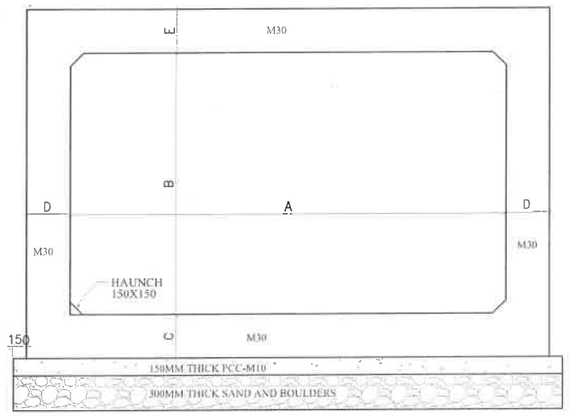
NOTES:-

1) All dimension are in mm and reduced levels are in meters.
2) Do not scale the drawing,written dimensions only shall be followed
3) The structure is designed adopting the following IRC and IS CODES IRC-21 , IRC 6-2014 & IS 456-2000
4) Grade of concrete conforming to IS 456-2000
   (i)Levelling coarse in foundation CC -M15 with 20mm d/s
   (ii)Retaining walls -CC-M25 with 20mm downsize coarse aggregate
5) All reinforcements shall be of high yield strength deformed bars (Grade designation Fe-550)
6) Sharp edges of concrete shall be chamfered
7) Filling behind retaining wall shall be as per relevant IRC specifications
8) Minimum clear cover to the reinforcement shall be 50mm unless otherwise mentioned
9) Joints and lapping of bar shall be suitably staggerd
10) SBC Shall not be less than 200 Kn/m2
    Important Note:
    While excution the strata(SBC) should be verified and suitable modification can be made.

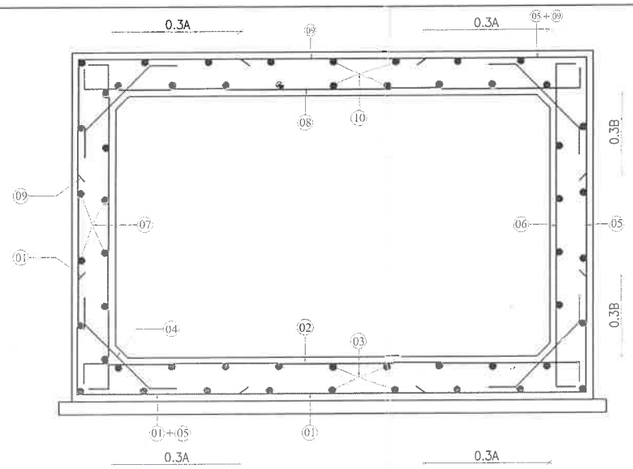
ALL DIMENSIONS ARE IN MM

ALL DIMENSIONS ARE IN MM

| S.NO | STEM HEIGHT | TOE WIDTH | HEEL WIDTH | WALL THICKNESS AT BOTTOM | TOTAL BASE SLAB WIDTH | BASE SLAB THICKNESS NEAR STEM | WALL HEIGHT FOR TAPER PORTION | BAR NUMBERS AND SHAPE | | |



CROSS SECTION OF RCC BOX CULVERT



REINFORCEMENT DETAILS OF RCC BOX CULVERT

NOTES:-

1) All dimension are in mm and reduced levels are in meters.
2) Do not scale the drawing,written dimensions only shall be followed
3) The structure is designed adopting the following IRC and IS CODES IRC-21 , IRC 6-2014 & IS 456-2000
4) Grade of concrete conforming to IS 456-2000
   (i)Levelling coarse in foundation CC -M10 with 20mm downsize coarse aggregate
   (ii)Raft, Walls & Slab -CC-M30 with 20mm downsize coarse aggregate
5) All reinforcements shall be of high yield strength deformed bars (Grade designation Fe-550)
6) Sharp edges of concrete shall be chamfered
7) Filling behind wall shall be as per relevant IRC specifications
8) Minimum clear cover to the reinforcement shall be 50mm unless otherwise mentioned
9) Joints and lapping of bar shall be suitably staggerd
10) SBC Shall not be less than 100 Kn/m2

Important Note:
While excution the strata(SBC) should be verified and suitable modification can be made.

BAR BENDING SCHEDULE

ALL DIMENSIONS IN MM

| S.NO. | CLEAR WIDTH | CLEAR DEPTH | RAFT THICKNESS | WALL THICKNESS | SLAB THICKNESS | BAR NUMBERS AND SHAPE | | |